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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/649,705

08/28/2003

Masao Suzuki

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6777

24956

7590

03/16/2006

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ALEXANDRIA, VA 22314

EXAMINER

CHOI, WOO H

ART UNIT

PAPER NUMBER

2189

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,705

Applicant(s)

SUZUKI, MASAO

Examiner

Woo H. Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-19 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/5/03, 4/22/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Specification

1. The amended title of the invention is still not descriptive since any storage system that behaves predictable can be said to execute operation procedure according to an operation rule. A new title is required that is clearly indicative of the invention to which the claims are directed. The Examiner suggests a more descriptive title such as: "Automatic scenario management for a policy-based storage system."

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 10, 12, 14, 16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsunami *et al.* (US Patent No. 6,912,627, hereinafter "Matsunami").

4. With respect to claims 1 – 9, Matsunami discloses a method for managing storage devices by using a computer (figure 10), wherein

said computer reads information about an operation rule (figure 10, policy) for said storage devices accommodated previously in a memory device and information (usable capacity,

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LUN definition procedures are confined to the available usable capacity, i.e., information about the associated procedures) about an operation procedure (procedures executed set up a LUN according to the selected policy, see col. 8, line 60 – col. 9, line 24) of said storage devices associated with said operation rule for said storage devices,

receives an instruction to select said information about said operation rule for said storage devices from a user, sends said storage devices an instruction to execute said operation procedure of said storage devices associated with information about said operation rule on the based on said operation rule received, obtains an execution result of said operation procedure or a state of utilization of storage devices (col. 8, line 60 – col. 9, line 24), and

changes said information about said operation procedure based on said execution result or said state of utilization (col. 9, lines 7 – 12, usable capacity is updated and displayed).

5. With respect to claims 10, 12, 14, 16 and 18, said operation procedure includes a plurality of parameters (col. 8, lines 57 – 59, host LUN and capacity), and said change of said information about said operation procedure is that at least one of said parameter is changed.

6. Claims 1 – 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Carlson et al. (US Patent Application Publication No. 2003/0135609, hereinafter “Carlson”).

Carlson discloses a method for managing storage devices by using a computer, wherein said computer reads information about an operation rule for said storage devices accommodated previously in a memory device and information about an operation procedure of

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said storage devices associated with said operation rule for said storage devices (figure 4, 300 – 308, see also figure 5, see also figures 9 - 12),

receives an instruction to select said information about said operation rule for said storage devices from a user, sends said storage devices an instruction to execute said operation procedure of said storage devices associated with information about said operation rule on the based on said operation rule received (figures 4, 5, 9 – 12), obtains an execution result of said operation procedure or a state of utilization of storage devices (figure 15 and 18), and

changes said information about said operation procedure based on said execution result or said state of utilization wherein said memory has a plurality of procedures, each of the operational procedures has a priority level, and said change of said information about said operation procedure is that said priority level of at least one of operation procedures is changed (figure 15, 1140 – 1146).

Response to Amendment

7. Claims 7 and 8 have been amended to overcome rejections under 35 USC 101. The Examiner believes that the added limitation “when executed by a computer” implies that the claimed program stored on a storage medium is of executable form and that the medium is computer readable. Accordingly, corresponding rejections are withdrawn.

8. Various claims have been amended to overcome rejections under 35 USC 112, second paragraph. Corresponding rejections are withdrawn.

Response to Arguments

9. Applicant's arguments with respect to rejections based on Devireddy reference have been considered but are moot since corresponding rejections a withdrawn based on the amendment.

10. Applicant's arguments with respect to Matsunami reference have been considered but they are not persuasive. Applicant argues that “at no point is there any teaching or suggestion in Matsunami that an operation procedure can be changed based on information obtained from the storage device itself ...” The Examiner notes that the claims do not require that an operation procedure be changed. They merely require that “information about an operation procedure” be changed. Moreover, Matsunami does teach a change in procedure based on execution result of the operation procedure on col. 10, line 1 – col. 11, line 29. Matsunami teaches that when the LUN allocation procedure detects that there is insufficient capacity, the process invokes additional procedures to allocate more space.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period


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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (571) 272-4179. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Woo H. Choi
March 9, 2006